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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,680	04/17/2000	GERHARD WOTTING	MO-5599/LEA3	1031
34947	7590	06/16/2004	EXAMINER	
BAYER CHEMICALS CORPORATION PATENT DEPARTMENT 100 BAYER ROAD PITTSBURGH, PA 15205-9741			GROUP, KARL E	
			ART UNIT	PAPER NUMBER
			1755	

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,680

Applicant(s)

WOTTING ET AL.

Examiner

Karl E Group

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5-7-04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5-7-04 has been entered.

Claim Rejections - 35 USC § 102 and 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 14-19, 21 and 23 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hintermayer (US 5,998,319 or WO 97/21644), for reasons of record.

It is agreed with applicants' argument that Hintermayer does not contain a single word about silicon oxynitride, however this is not considered to distinguish over the instant claims. If Hintermayer does not disclose the presence of any oxynitride phases then they are considered to be absent, absent tangible evidence to the contrary. It is further argued that Hintermayer fail to teach high corrosion resistance. This is not persuasive in overcoming the rejection because Hintermayer teach the application of ball bearings (column 3, lines 1-3), not unlike the application in the instant invention.

4. Claims 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hintermayer (5,998,319 and 97/21644) further in view of Sato et al (5,919,719).

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Hintermayer teaches the above described silicon nitride body however fails to teach the further addition of the compounds recited in claims 20 and 22.

Sato et al teach a silicon nitride sintered body where oxides or silicides of Mo or W may be added to increase the sinterability, densification and improve the characteristics.

It would have been obvious to one of ordinary skill in the art at the time of the invention to further include silicides and oxides of Mo and W to the silicon nitride body of Hintermayer because Sato et al teach that such an addition improves the sinterability, densification and characteristics of the silicon nitride body.

5. Claims 14-23 are rejected under 35 U.S.C. 102(a or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sato et al (5,919,719), for reasons of record.

Applicants' argument that the only example in Sato et al that falls within the claims silica/sintering aid ratio is a comparative example is not persuasive in overcoming the rejection. The comparative example falls clearly within the ranges of the components of the instant claims. Furthermore, a reference may be relied upon for all it teaches and is not limited to the disclosure of specific examples. In re Van Mater 144 USPQ 421 (1965). The taught ranges clearly overlap the claimed ranges.

6. Claims 14-19,21,23 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yeckley et al (5,508,241).

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Yeckley et al teach a silicon nitride sintered body to be used as a ball bearing material including .2-1 wt% alumina, 1-2% MgO and 2 to 4% silica, see column 2, lines 3-20.

The claims are considered anticipated or in the alternative the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time of the invention to have selected the overlapping portion of the range disclosed by the prior art because overlapping ranges have been held to be a prima facie case of obvious, see *In re Malagari*, 182 U.S.P.Q 549.

7. Claims 14-21,23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Richerson et al (3,836,374).

Richerson et al teach a silicon nitride sintered body including a sintering aid including MgO, alumina and silica. The silica may be present in amounts up to 81%, see table II, column 4. Furthermore a tungsten silicide may be present, column 5, lines 20-24.

The claims are considered anticipated or in the alternative the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time of the invention to have selected the overlapping portion of the range disclosed by the prior art because overlapping ranges have been held to be a prima facie case of obvious, see *In re Malagari*, 182 U.S.P.Q 549.

8. Applicants are requested to correct the silicon oxynitride compound on page 2 of the disclosure.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl E Group whose telephone number is 571-272-1368. The examiner can normally be reached on M-F (6:30-4:00) First Friday Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Karl E Group
Primary Examiner
Art Unit 1755

Keg
6-14-04